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sociocultural (gender relations, low valuation of prevention, consultation with the traditional healer). On the other hand, large variations were found between and within villages on the knowledge, attitudes and practices related to malnutrition. The ignorance of the population of the causes and consequences of this disease often led to feelings of shame among parents of malnourished children. Furthermore, this study revealed that many program activities were not well established in the Segue area, with significant differences between villages. Strong leadership and frequent awareness sessions by the community health workers might be instrumental to mobilize the population on the issues of malnutrition allowing a better coverage of PECMA program.

DISCLOSURE Nothing to disclose.

### PS2.124

## The effect of gender on mortality of patients on antiretroviral therapy in rural Mozambique

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BACKGROUND It has been documented that male HIV-related health outcomes are inferior to women's. While more women access HIV health care, primarily due to routine HIV screening during antenatal care, men present later and at a more advanced disease stage. We compared mortality and lost to follow up (LTFU) between men and women, from a cohort of patients in Mozambique. These patients had initiated antiretroviral treatment (ART) at primary health care level between January 2010 and 2015.

METHODS Retrospective analysis of data collected from health centres in the rural district of Ancuabe, Cabo Delgado Province. All patients ≥10 years who had started ART during the study period were included in the analysis. STATA version 13.1 was used to analyse the data, Cox proportional hazards model was used to compare probabilities for survival and LTFU between genders.

RESULTS 2332 patients were included in the analysis. 69.5% were female, 30.5% male. Women started ART at a younger age: 31 vs. 37 years (P < 0.000). Median CD4 count for women and men was 294 and 234 cells/ $\mu$ l (P = <0.000), respectively. Men also presented with significantly higher WHO stage (P = 0.000). Mortality was higher for men with a hazard ratio of 2.23 (P < 0.000 CI 1.7-2.9), as was loss to follow up (LTFU) (HR 2.25 P = 0.001 CI 1.4–3.6. After stratification for baseline CD4 count and WHO staging the hazard ratio for both mortality and LTFU were not significantly different between

CONCLUSION These results suggest that if HIV positive men sought treatment earlier and at a less advanced stage, their survival could equal that of HIV positive women. Interestingly, these two factors appear to also influence the risk of LTFU. Without detracting from the services for women and children, there needs to be greater focus on the early uptake of HIV services by men.

DISCLOSURE Nothing to disclose.

#### PS2.126

### Cultural epidemiology and community determinants of vaccine acceptance

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INTRODUCTION Vaccines are among the most effective tools for the control, elimination and eradication of infectious diseases. Their effectiveness in programme settings relies on efficacy, health system capacity to ensure access, and community acceptance. Local community awareness and willingness to use available vaccines, however, have been a relatively neglected component of global vaccine strategies. Cultural epidemiological studies of community acceptance of oral cholera vaccines in three African countries, and acceptance of pandemic influenza vaccines in India, were undertaken to address community determinants of acceptance and use. This presentation reviews the approach and implications.

MATERIALS AND METHODS Studies of actual or anticipated oral cholera vaccine (OCV) acceptance and use were completed in three African settings (Zanzibar, Western Kenya and Democratic Republic of Congo), and a similar study for pandemic influenza using comparable methods was completed in Pune, India. Explanatory model interviews based on the integrated quantitative and qualitative framework of the Explanatory Model Interview Catalogue (EMIC) for cultural epidemiology were used in community surveys to assess the awareness, priority and use of these vaccines, and the role of illness experience, perceived causes, help-seeking experience and other relevant considerations affecting vaccine hesitancy and confidence.

RESULTS Despite high anticipated acceptance of OCVs - more than 93% for a free vaccine in three African study settings - and high regard for the efficacy of the pandemic influenza vaccine in Pune (95%), use of these vaccine has been much lower. Models based on cultural epidemiological variables to explain determinants of acceptance provide a better account than models limited to socio-demographics.

CONCLUSIONS These studies identified local determinants and indicated an approach that may be generalized. A generic protocol based on the research experience has been designed to answer questions about the influence of community determinants and to promote awareness, acceptance and use through community engagement. The suggested approach has been adapted to guide strategies for influenza vaccination of pregnant women in low- and middle-income countries. We review the approach, implementation plans and their relevance for meeting a fundamental global health challenge, acknowledging both the value and limitations of global strategies for local problems. DISCLOSURE Nothing to disclose.

# PS2.127

### Evaluation of a community based tuberculosis detection program depending on ethnical particularities

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INTRODUCTION It is important to identify and evaluate tuberculosis (TB) contacts in order to give them the appropriate

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treatment as they may be at high risk for developing TB disease. Nowadays, immigrant's ethnical particularities may difficult these identifications.

OBJECTIVES To analyze the results of a community program designed to find TB contacts that don't have an easy access to health facilities because of their ethnical particularities. METHODS A descriptive retrospective study was performed. All cases with a confirmed diagnosis of TB referred to the community agents of the Tropical Medicine Center of Barcelona because of the difficulties for contact tracing were included during 2012–2014. Demographic characteristics and community actions were analyzed. Community actions outcome was evaluated through complete completion of chemoprophylaxis in contacts with latent TB or complete treatment in contacts with TB disease. Statistical analysis was performed using SPSS v 18.

RESULTS 122 cases meet the inclusion criteria, predominantly males (67.2%), with a mean age of 33 (1–72). Most had pulmonary TB (72.1%). 316 contacts were found. Most of them were males (74.4%), aged between 17 and 30 years (40.1%).

North Africa cases had a mean of 3.23 contacts (0–8) and were more easily reached by phone than other groups, with an average of 4.7 (2–12) calls. Indian and Pakistani cases had an average of 3.78 [1–10] contacts, and needed the highest number of phone calls 29.6 [2–135] to localize them. Eastern Europe cases had 3.58 contacts (1–10) and needed more mediation 1.16 [1–5]. Sub-Saharan cases had more contacts 9.42 (1–76) and needed more home visits 0.95 [1–15] and informal encounters 0.4 [0–7].

TB disease was found in 12 contacts (3.80%). 11 were correctly treated (91.7%). 54 contacts (17.1%) had a latent TB infection and 43 (79.3%) finished chemoprophylaxis. 108 contacts (34.2%) were exposed but not infected. 77 contacts (24.4%) were not exposed and 65 (20.5%) were lost. Conclusions Different community approaches are needed to track down TB cases with difficult access to health services, because of their ethnical particularities. The community activities are highly effective even if further actions and studies are needed in order to minimize losses.

DISCLOSURE Nothing to disclose.

## PS2.128

# Can in situ community screening interventions improve access to Chagas disease diagnosis?

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Introduction Nowadays, Chagas disease (CD) is a global problem in public health. Between 47 000 and 87 000 people are estimated to be infected in Spain, with an underdiagnosis of 92–95.2%. Community interventions must be developed in order to facilitate access to diagnosis. The aim of this study is to describe an *in situ* screening intervention among Bolivian migrants who attended a cultural event in Barcelona. MATERIALS AND METHODS Descriptive study of CD prevalence among Bolivians who attended a cultural event. Participants were recruited by community health agents. A survey was designed to assess inclusion/exclusion criteria and to gather variables. Blood samples belonging to people who had never undergone screening were obtained in a mobile testing van

from the blood bank that was present at the event. Results were communicated at doctor's appointment previously scheduled by telephone.

An informed consent was requested, data were treated confidentially and a descriptive and bivariate study was performed. RESULTS From the 181 recruited, 12 people were excluded for not being Bolivian; 30 (17.7%) had been previously screened, and 8 refused to participate. Those excluded in the study were given an appointment to the medical consultation. 131 people accepted to undergo screening (77.5%); CI 95% (70.35–84.65%). Of those, 35 (26.7%) presented positive serology: 54.3% women with a mean age of 39.5, coming from Santa Cruz and Cochabamba (45.7% and 31.4% respectively). The average length of stay in Spain was of 9.2 years and 94.3% stated they had knowledge on C.D. 57.2% continued subsequent follow-up.

Prevalence for CD was 26.7%; CI 95% (19.3–35.1%). CONCLUSIONS This intervention was very successful in terms of participation. This highlights the need of promoting screening activities in community spaces in order to facilitate access to diagnosis and to contribute to reduce the existing underdiagnosis as well as to implement other strategies to improve follow-up and accompaniment for affected people.

DISCLOSURE Nothing to disclose.

## PS2.129

Process to develop and validate behavior change communication messages for community acquired pneumonia in children under-five years of age in rural North India: a qualitative study

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INTRODUCTION Community Acquired Pneumonia (CAP) is the leading cause of childhood deaths worldwide. Delay in symptom recognition, appropriate care seeking and community distrust in the public health system are possibly responsible for this. Objective of this work was to develop and validate culturally sensitive Behavior Change Communication (BCC) messages for symptom recognition, timely and qualified care seeking and building trust in public health system.

MATERIALS AND METHODS For message development 7 step process was followed:

- 1 theme identification based on formative analysis
- 2 creative conceptualization of message by communication experts
- 3 content reduction with focus on action words, images/characters and setting by inputs from multidisciplinary experts
- 4 pilot testing using Focus Group Discussions (FGD) in natural setup for understandability
- 5 selection/modification of messages, tagline/logo based on a balance of being popular and least likely to be misunderstood
- 6 validation by FGDs on caregivers, health workers for duration of attention, understandability, cultural acceptability and recall of appropriate action
- 7 harmonization and customization of final products.

RESULTS Messages were developed on

- 1 symptom recognition
- 2 where/when to seek care
- 3 risk vulnerability perception.